

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Previously Presented) A compliant pin adapted to be pressed into a through-hole of a printed circuit board and have electrical contact with opposing surfaces of a side wall of the through-hole, said compliant pin comprising:

a portion insertable in the through-hole, said portion comprising spaced deflectable beam portions, each beam portion including an interface portion having a cylindrical outer surface, said outer surfaces of said interface portions being spaced apart a distance greater than the spacing of the opposing surfaces of the side wall, said outer surfaces engaging the side wall and said beam portions deflecting toward each other when said portion is inserted in the through-hole, said interface portions frictionally engaging the side wall and providing a retention force for retaining said portion in the through-hole;

said portion comprising an opening extending through said portion and defining inner surfaces of said beam portions, said inner surfaces consisting essentially of a plurality of blended cylindrical surfaces;

said interface portions each including a cylindrical inner surface comprising a portion of said inner surface of its respective beam portion, said inner surface and outer surface of each interface portion being convex and facing away from each other, said interface portions having a cross-

sectional area that is greater than a cross-sectional area of a remainder of said beam portions.

2. (Original) The compliant pin recited in claim 1, wherein said frictional engagement provides a retention force of at least four pounds for retaining said portion in the through-hole, said portion having a thickness of no greater than 0.4 millimeters.

3. (Original) The compliant pin recited in claim 2, wherein the thickness of said portion is measured perpendicular to both a longitudinal axis of said portion and a lateral axis of said portion.

4. (Original) The compliant pin recited in claim 2, wherein said portion has a length of about 3.22 millimeters and a width of about 1.24 millimeters measured between said outer surfaces of said beam portions, the through-hole having a diameter of about 1.0 millimeter.

5. (Original) The compliant pin recited in claim 1, wherein said inner surfaces of said beam portions each include a central cylindrical surface, said central cylindrical surfaces being convex and presented facing each other, said central cylindrical surfaces defining a central portion of said opening.

Claims 6-8 (Canceled).

9. (Original) The compliant pin recited in claim 1, wherein said compliant pin has a longitudinal axis and a lateral axis extending perpendicular to the longitudinal axis, said cylindrical surfaces having axes that extend perpendicular to both the longitudinal axis and the lateral axis of said contact.

10. (Original) The compliant pin recited in claim 1, further comprising a positioning portion comprising first and second leg portions positioned on laterally opposite sides of said portion, each of said legs having a surface for engaging a surface of the printed circuit board adjacent the through-hole and limiting insertion of said portion in the through-hole to help place said portion at a predetermined axial position in the through-hole.

11. (Original) A compliant pin adapted to be pressed into a through-hole of a printed circuit board and have electrical contact with opposing surfaces of a side wall of the through-hole, said compliant pin comprising:

a portion insertable in the through-hole, said portion engaging the opposing surfaces of the side wall and providing a frictional engagement between said portion and the side wall, the frictional engagement providing a retention force of at least four pounds for retaining said portion in the through-hole, said portion having a thickness no greater than 0.4 millimeters.

12. (Original) The compliant pin recited in claim 11, wherein the thickness of said portion is measured perpendicular to both a longitudinal axis of said portion and a lateral axis of said portion.

13. (Original) The compliant pin recited in claim 11, wherein said portion has a length of about 3.22 millimeters and a width of about 1.24 millimeters, the through-hole having a diameter of about 1.0 millimeter.

14. (Original) The compliant pin recited in claim 11, wherein said portion for engaging the opposing surfaces of the side wall comprises spaced deflectable beam portions having outer surfaces spaced apart a distance greater than the spacing of the opposing surfaces of the side wall, said beam portions engaging the side wall and deflecting toward each other when said portion is inserted in the through-hole and providing the frictional engagement between said portion and the side wall, said portion comprising an opening extending through said portion and defining inner surfaces of said beam portions opposite said outer surfaces, said inner surfaces consisting essentially of a plurality of blended cylindrical surfaces.

15. (Original) The compliant pin recited in claim 14, wherein said inner surfaces of said beam portions each include a central cylindrical surface, said central cylindrical surfaces being convex and presented facing each other, said

central cylindrical surfaces defining a central portion of said opening.

16. (Original) The compliant pin recited in claim 15, wherein said central cylindrical surfaces help define central interface portions of each of said beam portions, each of said interface portions including an interface surface formed on said outer surfaces of said beam portions opposite the central cylindrical surface of each respective beam portion, said interface surfaces having convex cylindrical configurations and being presented facing away from each other.

17. (Original) The compliant pin recited in claim 16, wherein said interface surfaces provide said frictional engagement with the side wall of the through-hole.

18. (Original) The compliant pin recited in claim 15, wherein said central cylindrical surfaces help define central interface portions of each of said beam portions, each of said interface portions including an interface surface formed on said outer surfaces of said beam portions opposite the central cylindrical surface of each respective beam portion, said interface portion of each of said beam portions having a cross-sectional area that is greater than a cross-sectional area of a remainder of said beam portions.

19. (Original) The compliant pin recited in claim 11, wherein said compliant pin has a longitudinal axis and a

lateral axis extending perpendicular to the longitudinal axis, said cylindrical surfaces having axes that extend perpendicular to both the longitudinal axis and the lateral axis of said contact.

20. (Original) The compliant pin recited in claim 11, further comprising a positioning portion comprising first and second leg portions positioned on laterally opposite sides of said portion, each of said legs having a surface for engaging a surface of the printed circuit board adjacent the through-hole and limiting insertion of said portion in the through-hole to help place said portion at a predetermined axial position in the through-hole.

Claim 21 (Canceled).

22. (Previously Presented) The compliant pin recited in claim 11, wherein said portion comprises spaced deflectable beam portions each including an interface portion having a cylindrical outer surface and a cylindrical inner surface, said inner and outer surfaces of each of said beam portions being convex and facing away from each other, said interface portions having a cross-sectional area that is greater than a cross-sectional area of a remainder of said beam portions.

23. (New) A compliant pin adapted to be pressed into a through-hole of a printed circuit board and have electrical

contact with opposing surfaces of a side wall of the through-hole, said compliant pin comprising:

a portion insertable in the through-hole, said portion comprising spaced deflectable beam portions, each beam portion including an interface portion having a cylindrical outer surface, said outer surfaces of said interface portions being spaced apart a distance greater than the spacing of the opposing surfaces of the side wall, said outer surfaces engaging the side wall and said beam portions deflecting toward each other when said portion is inserted in the through-hole, said interface portions frictionally engaging the side wall and providing a retention force for retaining said portion in the through-hole;

said portion comprising an opening extending through said portion and defining inner surfaces of said beam portions, said inner surfaces consisting essentially of a plurality of blended cylindrical surfaces;

said interface portions each including a cylindrical inner surface comprising a portion of said inner surface of its respective beam portion, said inner surface and outer surface of each interface portion being convex and facing away from each other, said interface portions having a cross-sectional area that is greater than a cross-sectional area of a remainder of said beam portions; and

wherein said compliant pin extends completely through said through hole.

24. (New) The compliant pin recited in claim 23 wherein said compliant pin extends through said through hole until said opening of said portion projects below the bottom of said printed circuit board.

25. (New) The compliant pin recited in claim 23 wherein said inner surfaces of said beam portions each include a central cylindrical surface, said central cylindrical surfaces being convex and presented facing each other, said central cylindrical surfaces defining a central portion of said opening.